

The Examiner alleges in the Official Action that at page 24 of the specification, Applicants consider the "Iowa strain" to encompass PRRSV strains such as VR 2332 and Lelystad. However, the Examiner should note that page 24 of the specification defines "porcine reproductive and respiratory syndrome virus" (lines 4-5), and not the "Iowa strain" subset of those PRRSV viruses.

Rather, the Examiner is directed to page 28, lines 12-21 of the specification, which distinguishes European strains such as Lelystad viruses from US strains of PRRSV, and page 28, line 22 - page 29, line 10, which specifically define an "Iowa strain" of PRRSV as requiring "at least a 97% sequence identity (or homology) in the seventh open reading frame (ORF 7) with at least one of VR 2385, VR 2430, and VR 2431" and/or "at least 80% and preferably at least 90% homology with one or more of ORF's 2-5 of VR 2385". In light of this explicit definition in the specification, Applicants submit that the metes and bounds of "Iowa strain" are more than adequately defined the specification to clearly define the claimed invention. Withdrawal of this rejection is therefore respectfully requested.

The Examiner has also rejected Claims 30 and 31 under 35 U.S.C. §103(a) over Wensvoort et al. This rejection is respectfully traversed.

Initially, Applicants disagree with the Examiner's assertion regarding the parent applications to which the present application is entitled to benefit. Indeed, Applicants note that application 08/131,625, filed on October 5, 1993 ("the '625 application"), now U.S. Patent No. 5,695,766 ("the '766 patent"), discloses at Column 3, lines 60-63, that "It is a further object of the present invention to provide a diagnostic kit for assaying a virus which causes a porcine respiratory and reproductive disease, particularly a disease caused by the

Iowa strain of PRRSV." Similarly, see page 8, lines 20-22 of the U.S. Application Serial No. 07/969,071, filed October 30, 1992 ("the '071 application"). The '071 application discloses the Iowa strain ISU-12, which was deposited on the filing date of the '071 application, October 30, 1992. Moreover, Columns 29-31 of the '766 patent specifically disclose primers of 10-50 nucleotides in length, which can be used to assay for an Iowa strain of PRRSV. Furthermore, Figures 19 and 21-24 of the '766 patent show sequences of entire ORFs of ISU-12, an Iowa strain. Thus, Applicants submit that the present application is entitled to these earlier filing dates.

Wensvoort et al. discloses the Lelystad virus. As discussed in Morozov et al. (1995) *Arch. Virol.* 140:1313-1319, a copy of which is submitted herewith, "[t]he nucleic acid homology [of VR 2385] with corresponding ORFs of the European PRRSV isolate Lelystad virus (LV) was 65% for ORF2, 64% for ORF 3 and 66% for ORF 4." (See Abstract) Thus, even assuming, *arguendo*, that Wensvoort et al. is prior art to the present claims, the Lelystad virus disclosed by Wensvoort et al. is clearly outside the definition of an "Iowa strain" noted above and in the present specification. Furthermore, from a review of Figures 8-11, and 21 of the present application, which show sequence comparisons of an Iowa strain, ISU-12, to Lelystad virus, and Figure 17, which shows a comparison of various Iowa strains to Lelystad virus, it would not have been obvious, based on the sequence of Wensvoort et al. alone, to choose a primer of 10-50 nucleotides in length, which would hybridize to an Iowa strain under the stated conditions. Withdrawal of this rejection is therefore respectfully requested.

In light of the foregoing, Applicants submit that the present application is in condition for allowance. Early notification of the same is respectfully requested.

In the event that there are any questions relating to this Amendment, or the application in general, it would be appreciated if the Examiner would telephone the undersigned attorney concerning such questions so that prosecution of this application may be expedited.

Respectfully submitted,

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